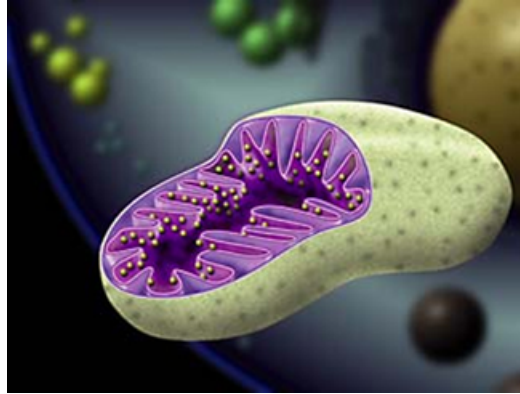


Cell Parts

Organelle - "tiny organ" perform a specialized job within the cell

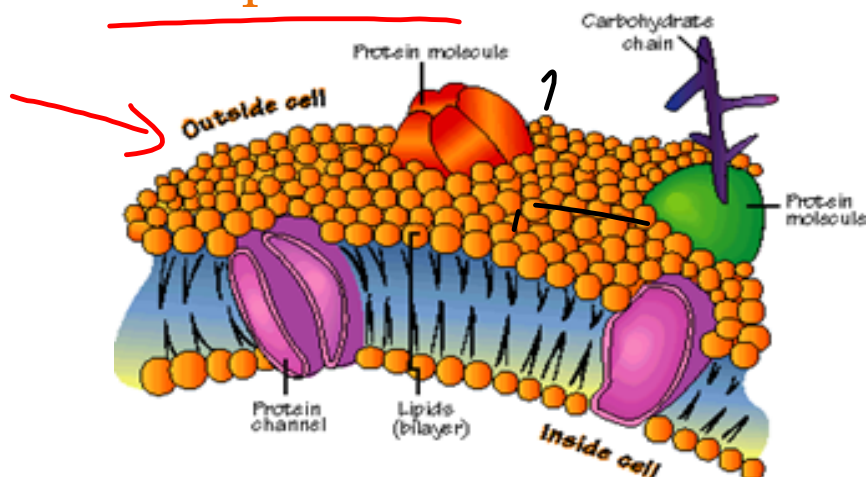
Nuclear envelope/membrane - a semi-permeable membrane that surrounds and protects the nucleus

Mitochondria - This is where cellular respiration takes place and energy is provided to the organism.
Also known as the "POWER PLANT" of the cell



Lysosome - known as suicide sacs contain digestive enzymes that breakdown food, help digest wastes and worn out cells parts

The **cell membrane** - it controls the movement of materials in and out of the cell. It's semi permeable



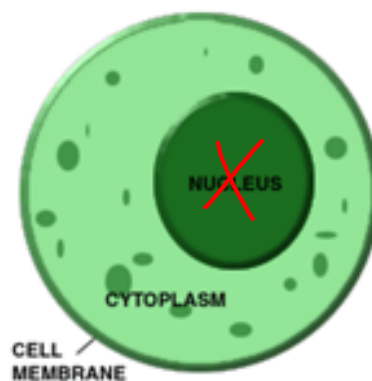
Golgi Complex/Bodies/Apparatus

a storage and packaging facility for proteins

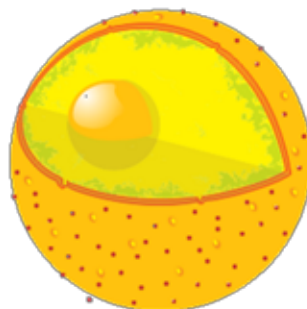
Sugars

Vacuole ^{*carbs*} ↓ fluid filled storehouse that contain water, food, CO₂ and wastes

The **cytoplasm** is a jelly-like material that supports the nucleus and the other organelles.



The **nucleus** acts as the control center for the cell - where DNA is found
Genetic material

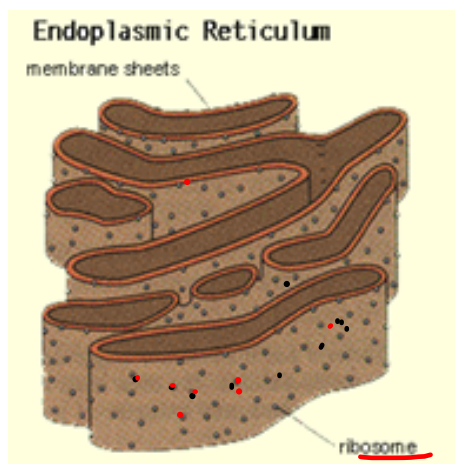


Nucleolus - small dense region within the nucleus where ribosomes are first assembled (but scientists are not 100% sure about this)

The **endoplasmic reticulum** is a series of canals that transports materials (proteins) to different parts of the cell.

- assemble parts of the cell membrane, breakdown drugs

SER
RER



Rough

Rough Endoplasmic Reticulum has ribosomes attached. Smooth E.R. does not.

Ribosomes - make/assemble proteins from amino acids which are required for cell growth and reproduction

Lesson 2B Cell Parts.notebook

Chloroplasts contain the green pigment chlorophyll... the site of photosynthesis.

Cell wall is made of cellulose and **provides protection and support for the plant cell.**



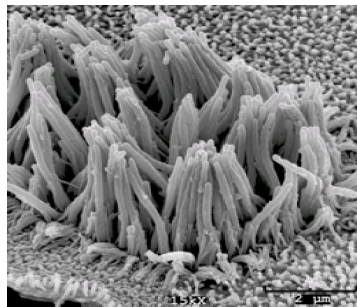
Centriole is a small protein that chromosomes attach to in cell division of an animal cell

- Cytoskeleton – a network of protein filaments that give a cell its shape
- Microtubules and microfilaments make up the cytoskeleton

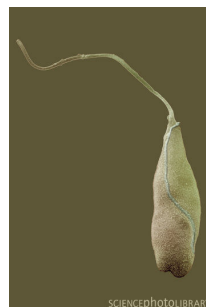
like straws *like hair*



Cilia are tiny hair-like structures that help transport materials in certain cells.



Flagella are thread-like fibers (tails) that propel certain cells (ex. sperm)



<https://www.youtube.com/watch?v=1Z9pqST72is>

<http://www.bozemanscience.com/a-tour-of-the-cell>

Plant and Animal Cell Differences

Animal	Plant
<ul style="list-style-type: none">- No cell wall- No chloroplast- more circular- have lysosomes- Several vacuoles- have centrioles- often have cilia or flagella	<ul style="list-style-type: none">has a cell wallhave chloroplast (photosynthesis)more polygonalno lysosomes1 large vacuoleno centrioles- usually ^{no} cilia or flagella